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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,112	02/12/2002	Susumu Igarashi	00862.022515.	3713

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FITZPATRICK CELLA HARPER & SCINTO  
30 ROCKEFELLER PLAZA  
NEW YORK, NY 10112

EXAMINER

DANG, DUY M

ART UNIT PAPER NUMBER

2621

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/073,112

**Applicant(s)**

IGARASHI ET AL.

**Examiner**

Duy M. Dang

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 2,4,6,8-22,24 and 26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,5,7,23 and 25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/3/02.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Applicant's election of species I of figure 1, claims 1, 3, 5, 7, 23, and 25 filed on 3/11/05 is acknowledged. Because applicant did not (1)specify whether the election is made with traverse or without traverse, and (2)distinctly and specifically point out the supposed errors in the restriction requirement, applicant's election is considered as an incomplete reply which fails to comply with the requirement of 37 CFR § 1.111. Therefore, applicant's election is considered as an election without traverse (MPEP § 818.03(a)). Furthermore, claims 2, 4, 6, 8-22, 24, and 26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim.

The requirement is still deemed proper and is therefore made FINAL.

2. Applicant's amendment to cancel claims 2, 4, 6, 8-22, 24, and 26 as drawn to non-elected species is advised in response to this office action.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1, 3, 5, 7, 23, and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the factors" in line 15. There is insufficient antecedent basis for this limitation in the claim. These claimed "factors" are not clear as to whether they refer to "orthogonal transformation factors" or the "quantized orthogonal transformation factors". Please clarify.

Dependent claims 3, 5, and 7 are also rejected for the same reasons as above.

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Likewise, both claims 23 and 25 recite “the factors” in last line and therefore, these claims 23 and 25 are also rejected for the same reasons as set forth in claim 1 above.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 3, 5, 7, and 23 are rejected under 35 U.S.C. 102(a) as being antipated by Applicant’s admitted prior art [see pages 1-9 of the instant specification. Referred as the APA hereinafter].

Regarding claim 1, the APA teaches:

a first scan converter for rearranging the orthogonal transformation factors in a first scan sequence and outputting the predetermined number of factors at a time [see last four lines of page 1 and page 2 lines 1-7: the use of orthogonal transformation for outputting orthogonal transformation factors which are rearranged by zigzag scan converter and outputted in twos];

a second scan converter for rearranging quantized orthogonal transformation factors in a zigzag scan sequence and outputting the factors [see zigzag scan mentioned in lines 17-18 of page 3. Note that this zigzag scan is used for rearranging the results of quantization].

Regarding claims 3, 5, and 7, the APA does not explicitly teach odd-numbered samples are arranged in the forward direction from the start of the zigzag scan sequence and even-numbered samples arranged in a reverse direction from an end of the zigzag scan sequence. However, the using of zigzag scanning method in the APA as pointed out in claim 1 above does

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inherently include such claimed features. In addition, the zigzag scanning used in the APA does refer to the claimed "raster scan sequence" as recited in claims 5 and 7.

Regarding claim 23, it is noted that this claim is a method claim reciting similar features called for in apparatus claim 1. Thus, claim 23 is also rejected for the same reasons as set forth in claim 1 above.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over the APA.

The advanced statements in paragraph 6 above as applied to claims 1, 3, 5, 7, and 23 are incorporated hereinafter.

With regard to claim 25, it is noted that this claim recites a computer-readable storage medium storing an image coding program comprising similar features called for in claim 1 above. While the APA teach all that claimed except the use of computer readable storage medium storing an image coding program. Utilizing a computer readable storage medium storing an image coding program is so well known and widely used (Official Notice) in the art in order to simplify the system, allow modification easier, and advance cost reduction.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the well known features in combination with the APA for that reasons.

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9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The examples of the field of invention are: Hatano et al. [US Patent No. 5,432,556], Boon [US Patent No. 6,608,936], and Saito et al. [US Patent No. 5,761,345].

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duy M. Dang whose telephone number is 571-272-7389. The examiner can normally be reached on Monday to Friday from 5:30AM to 2:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Mancuso can be reached on 571-272-7695. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306 before July 15, 2005.

Effective July 15, 2005, the Central FAX Number will change to 571-273-8300. This new Central FAX Number is the result of relocating the Central FAX server to the Office's Alexandria, Virginia campus. Most facsimile-transmitted patent application related correspondence is required to be sent to the Central FAX Number. To give customers time to adjust to the new Central FAX Number, faxes sent to the old number (703-872-9306) will be routed to the new number until September 15, 2005. After September 15, 2005, the old number will no longer be in service and 571-273-8300 will be the only facsimile number recognized for "centralized delivery".

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read 'Duy M. Dang', written in a cursive style.

Duy M. Dang  
Patent Examiner